

## METHOD FOR ELECTROLESS PLATING

### A CONTACT PAD

#### Abstract of the Disclosure

A method and apparatus is disclosed for sequential processing of integrated  
5 circuits, particularly for conductively passivating a contact pad with a material which  
resists formation of resistive oxides. In particular, a tank is divided into three  
compartments, each holding a different solution: a lower compartment and two upper  
compartments divided by a barrier, which extends across and partway down the tank. The  
solutions have different densities and therefore separate into different layers. In the  
10 illustrated embodiment, integrated circuits with patterned contact pads are passed through  
one of the upper compartments, in which oxide is removed from the contact pads.  
Continuing downward into the lower compartment and laterally beneath the barrier, a  
protective layer is selectively formed on the insulating layer surrounding the contact pads.  
As the integrated circuits are moved upwardly into the second upper compartment, a  
15 conducting monomer selectively forms on the contact pads prior to any exposure to air.  
The integrated circuits can then be transferred to an ozone chamber where polymerization  
results in a conductive passivation layer on the contact pad.

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